What is claimed is:

[c1] 1. A method of calibrating a crossconnect including a MEMS device and another optical device, each of which further include a plurality of elements, said method comprising:

(a) determining a relationship between an applied voltage and an angle response for a number of the elements of the MEMS device;

(b) determining a function of beam position and element position for the number of the elements of the MEMS device;

(c) assembling the MEMS device and the another optical device to produce the crossconnect;

(d) applying voltages to make sample connections between the MEMS device and the another optical device based on the relationship and the function;

(e) determining a transformation for the sample connections caused by packaging the crossconnect; and

(e) redetermining the relationship and the function based on the transformation.

[c2] 2. The method of calibrating a crossconnect of claim 1, wherein said step of determining a relationship between the applied voltage and the angle response includes a combination of measuring values and estimating values.

[c3] 3. The method of calibrating a crossconnect of claim 2, wherein the estimated values are estimated using one of mathematical function fitting and interpolation.

[c4] 4. The method of calibrating a crossconnect of claim 1, wherein said step of determining the destination of the signal as a function of mirror position is done by raytracing.

[c5] 5. The method of calibrating a crossconnect of claim 1, wherein the sample connections are made for corner elements.

[c6] 6. The method of calibrating a crossconnect of claim 1, wherein the transformation includes at least one of an x and y offset, a rotation offset, and a magnification.

[c7] 7. The method of calibrating a crossconnect of claim 1, wherein at least one of the MEMS device and the another optical device are one of gimbaled mirror arrangements, non-moving elements, and optical fibers.

[c8] 8. The method of calibrating a crossconnect of claim 1, further comprising iterating steps (a)-(f).

[c9] 9. A method of preparing a MEMS device and another optical device for calibration as a crossconnect, the MEMS device and the another optical device each including a plurality of elements, said method comprising:

(a) determining a relationship between an applied voltage and an angle response for a number of the elements of the MEMS device; and

(b) determining a function of beam position and element position for the number of the elements of the MEMS device.

[c10] 10. The method of calibrating a crossconnect of claim 9, wherein said step of determining a relationship between the applied voltage and the angle response includes a combination of measuring values and estimating values.

[c11] 11. The method of calibrating a crossconnect of claim 9, wherein the estimated values are estimated using one of mathematical function fitting and interpolation.

[c12] 12. The method of calibrating a crossconnect of claim 9, wherein said step of determining the destination of the signal as a function of mirror position is done by raytracing.

[c13] 13. The method of calibrating a crossconnect of claim 9, wherein the transformation includes at least one of an x and y offset, a rotation offset, and a magnification.

[c14] 14. The method of calibrating a crossconnect of claim 9, wherein at least one of the MEMS device and the another optical device are one of gimbaled mirror arrangements, non-moving elements, and optical fibers.

[c15] 15. A crossconnect including a MEMS device and another optical device calibrated by the method of claim 1.

[c16] 16. A method of calibrating a crossconnect including a MEMS device and another optical device, each of which further including a plurality of elements, said method comprising:

(a) applying voltages to make sample connections between the MEMS device and the another optical device based on a relationship between an applied voltage and an angle response for a number of the elements of the MEMS device and a function of beam position and element position for the number of the elements of the MEMS device;

(b) determining a transformation for the sample connections caused by packaging the crossconnect; and

(c) redetermining the relationship and the function based on the transformation.

[c17] 17. The method of calibrating a crossconnect of claim 16, wherein the relationship between the applied voltage and the angle response includes a combination of measuring values and estimating values.

[c18] 18. The method of calibrating a crossconnect of claim 17, wherein the estimated values are estimated using one of mathematical function fitting and interpolation.

[c19] 19. The method of calibrating a crossconnect of claim 16, wherein the function of beam position and element position for the number of the elements of mirror position is obtained by raytracing.

[c20] 20. The method of calibrating a crossconnect of claim 16, wherein the transformation includes at least one of an x and y offset, a rotation offset, and a magnification.

[c21] 21. The method of calibrating a crossconnect of claim 16, wherein at least one of the MEMS device and the another optical device are one of gimbaled mirror arrangements, non-moving elements, and optical fibers.

[c22] 22. The method of calibrating a crossconnect of claim 16, further comprising iterating steps (a)-(c).